

(vi) Tshuprov's speech at the same meeting of the Academy.

While the name of Markov is very familiar to all probabilists-statisticians, particularly in connection with the theory of Markov Processes, his personality and the evolution of his ideas, influenced by contacts with the much less known Tshuprov, are "terra incognita". During the early decades of the present century, Markov was somewhat conspicuous by the sharpness of his polemics and was frequently referred to as "Andrew the Terrible" (= Neistoviy Andrey). This trait of Markov is reflected in the correspondence published in the book. In fact, this correspondence was initiated by Markov scolding Tshuprov for mentioning the name of Necrasov next to that of Chebyshev. Tshuprov replied politely and, as the rapid fire correspondence went on, there occurred a very noticeable change in the relationship of the two scholars and, in particular, a change in the opinions of Markov on the works of such authors as Karl Pearson, Burns, Lexis and others. It is this evolution of Markov's thinking that the present reviewer finds fascinating.

In formulating his occasional comments on the Markov-Tshuprov correspondence, editor Ondar consulted Professors B. V. Gnedenko and K. A. Rybnikov.

Before concluding, I wish to repeat my regrets that, in the early 1930's, when working on optimal stratification of a sample survey, I overlooked a paper by Tshuprov published in *Metron* in 1923. My recognition of Tshuprov's priority appeared in the *J.R.S.S.*, A, Vol. CXV, 1952.

MATHEMATISCHES TAGEBUCH, 1796-1814 VON C. F. GAUSS. By C. F. Gauss. Edited by K.-R. Biermann. Ostwalds Klassiker 256.

*Reviewed by Tord Hall,
University of Uppsala, Uppsala, Sweden*

At the 200-anniversary of the birth of Gauss, his mathematical journal, or diary, was published in this new edition and with new detailed comments. That "Tagebuch" was not found until 1898. It plays an important role in judging his mathematical contributions, since it contains a great deal that Gauss never published or which he only hinted at in letters to his friends.

It is a booklet of twenty small octavo pages, covering the period from March 30, 1796 to July 9, 1814. Altogether there exist 146 very short accounts of discoveries, results of numerical calculations, and so on. The journal gives us a clear view of Gauss's mathematical development, particularly during the significant years 1796-1801--almost all of the entries, 121 of them, fall in this interval.

As with Mozart, Gauss is supposed to have been so overwhelmed with new ideas during his youth that he did not have time to carry out one task before another turned up. So the journal was made, and probably it was Gauss's intention to put the entries into detailed form later. But his manysidedness and his demands for rigor, formal clarity and synthesis became hard obstacles. Gauss used to say that when a building is completed no one should be able to see any trace of the scaffolding. A consequence of his demands was that he never published his fundamental achievements in fields like non-Euclidean geometry and elliptic functions, which have their entries in the journal.

The new edition begins with a historical review by Kurt-R. Biermann. Then follows: The journal in facsimile, a printed copy of the Latin text, a translation of the text into German by E. Schuhmann, and comments on the journal by H. Wussing.

It is a fascinating little book, where we, under most competent guidance, get an insight into "the intellectual workshop" of Gauss.